

FIG. 1A

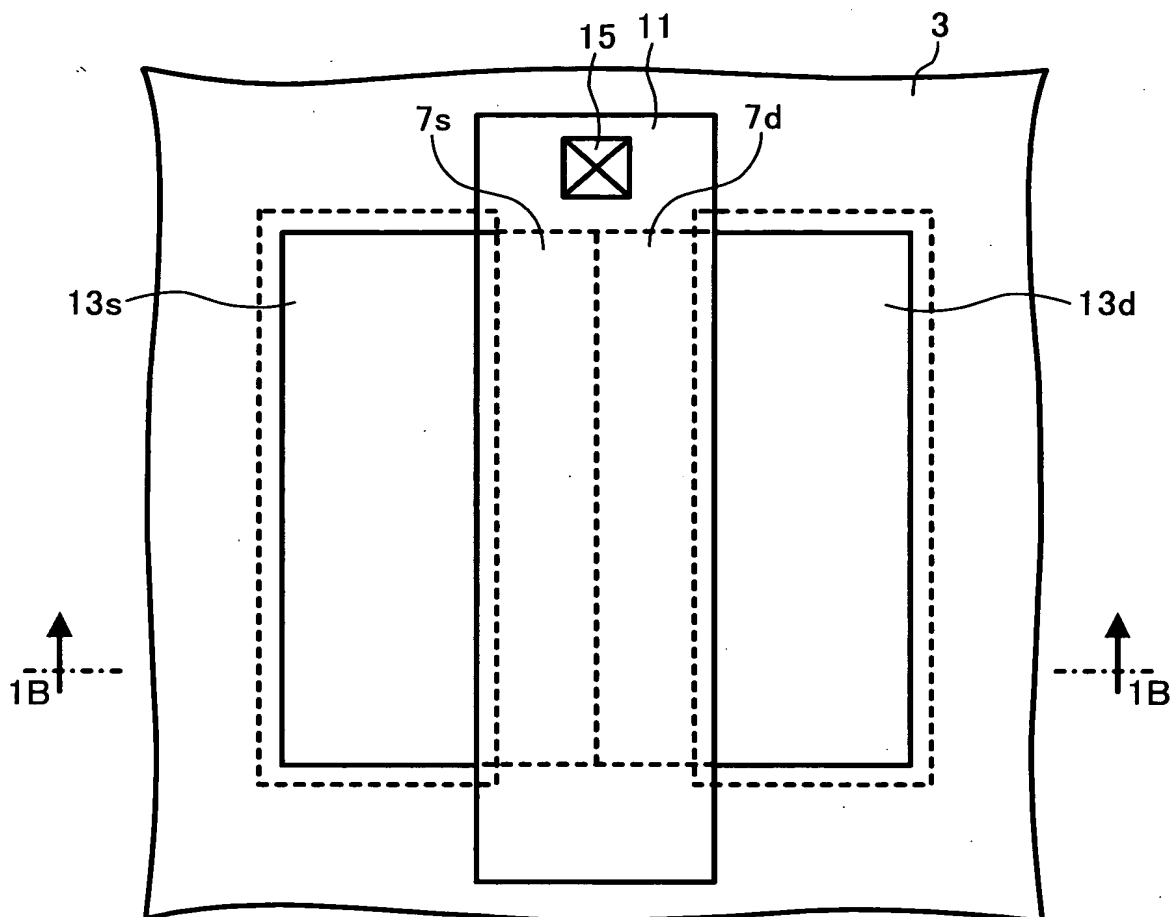


FIG. 1B

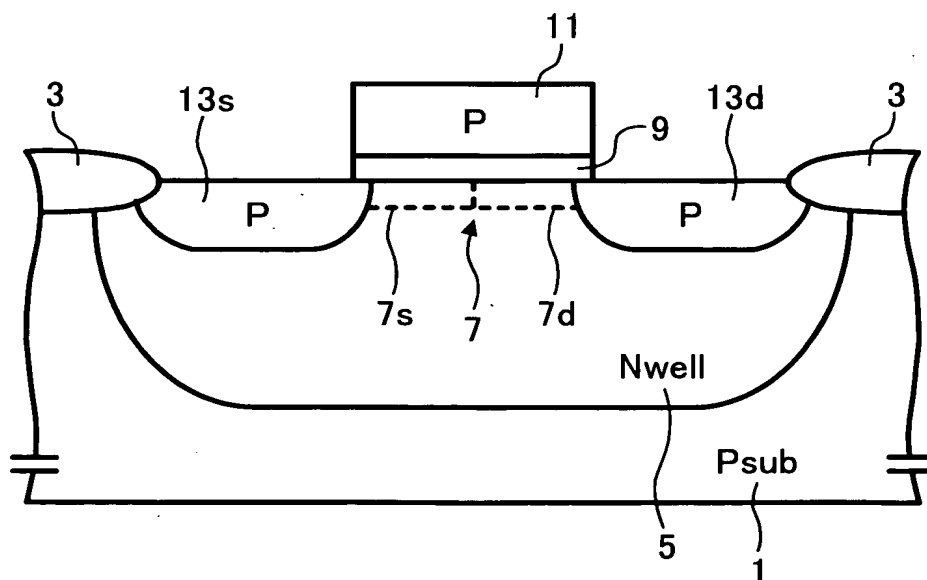


FIG. 2

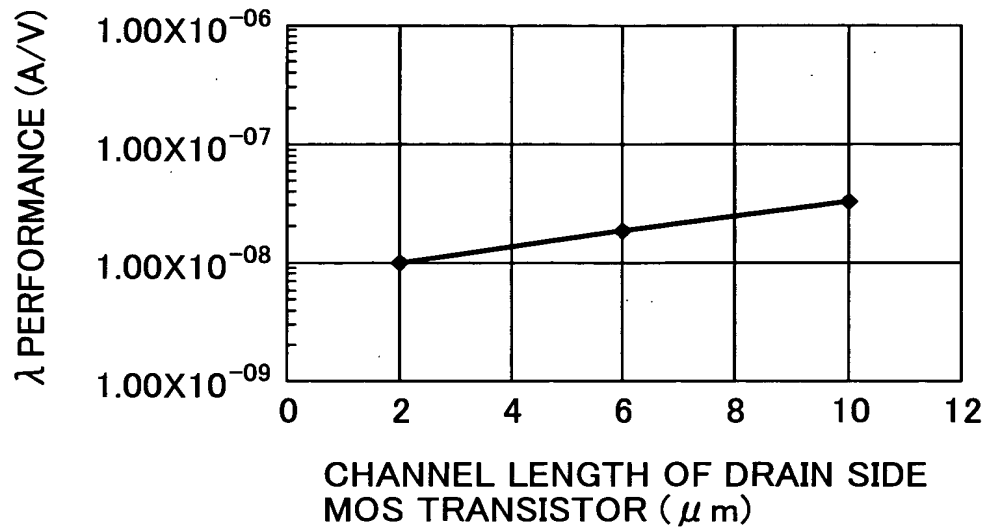
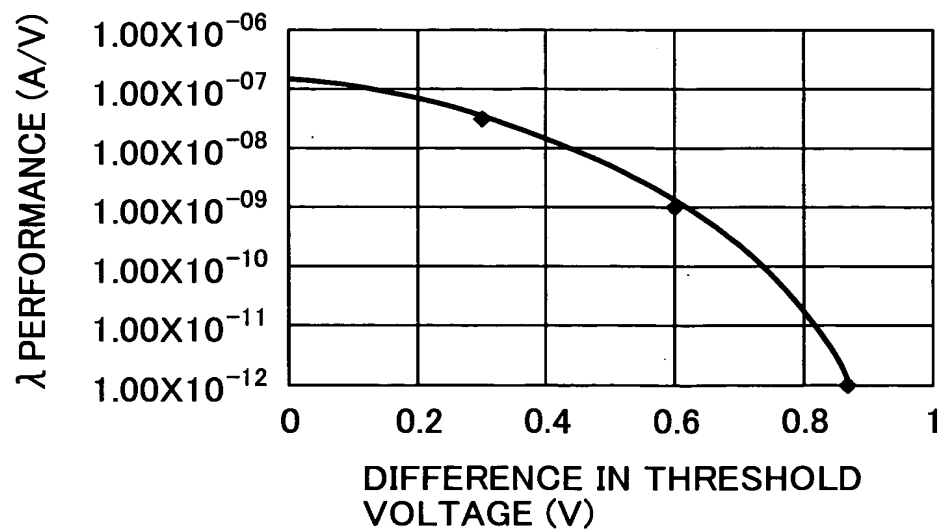
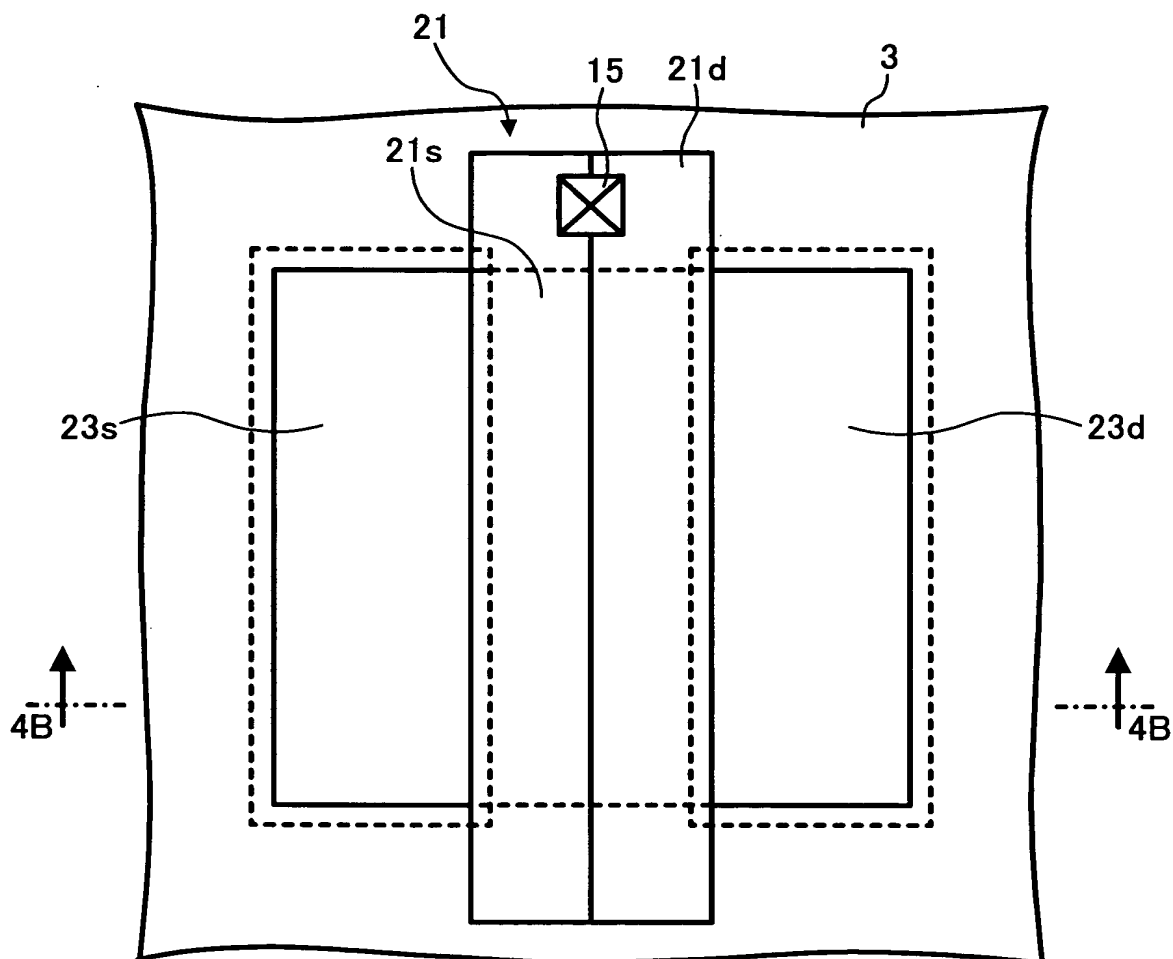


FIG. 3



**FIG. 4A**



**FIG. 4B**

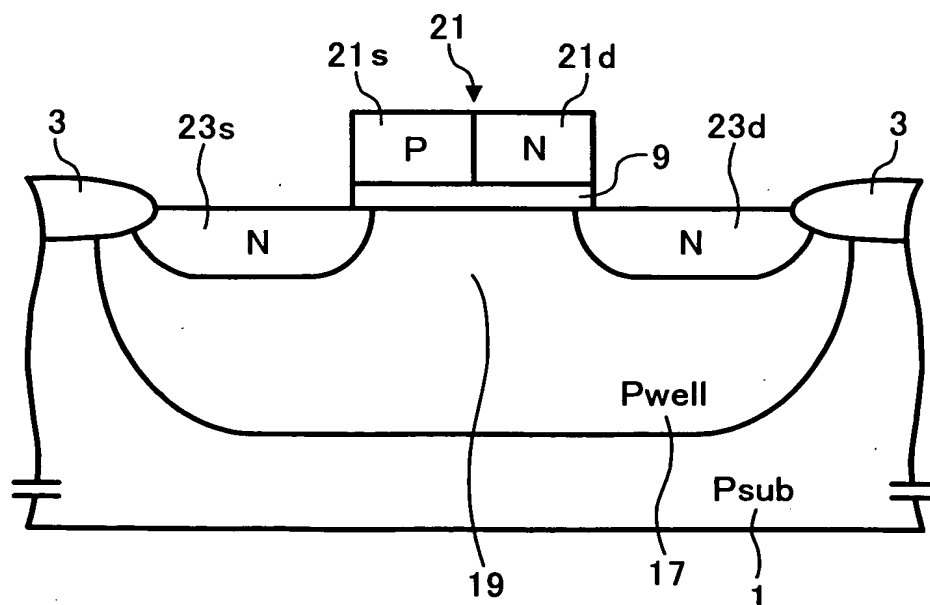


FIG. 5A

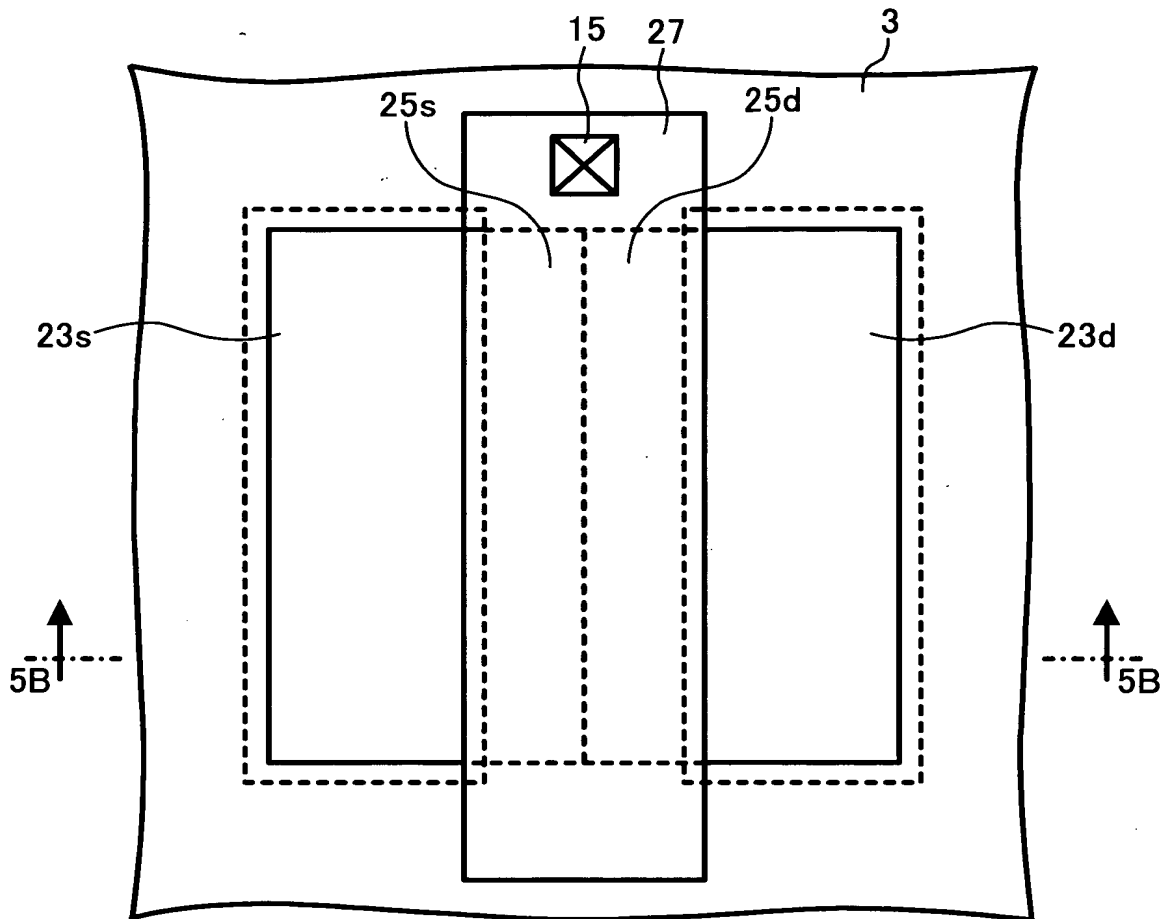


FIG. 5B

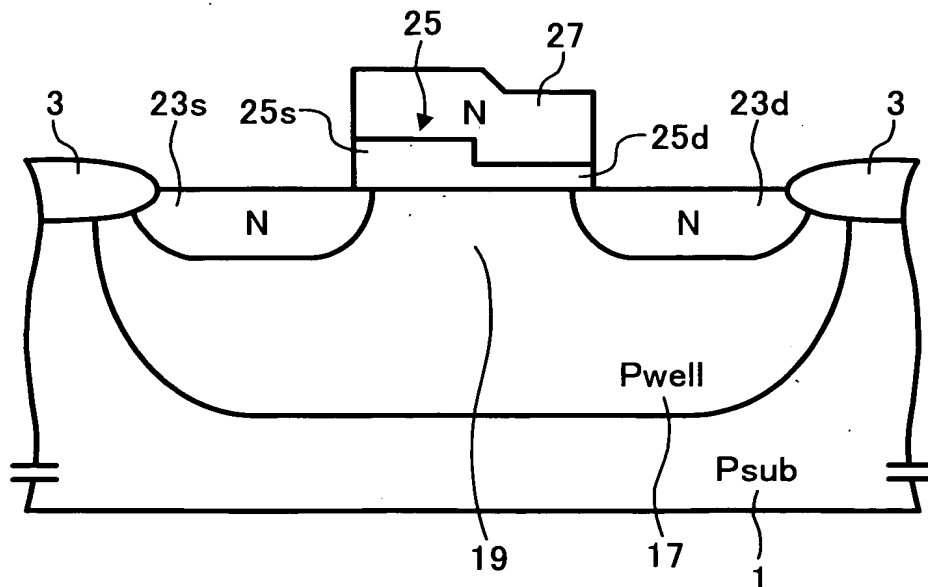


FIG. 6A

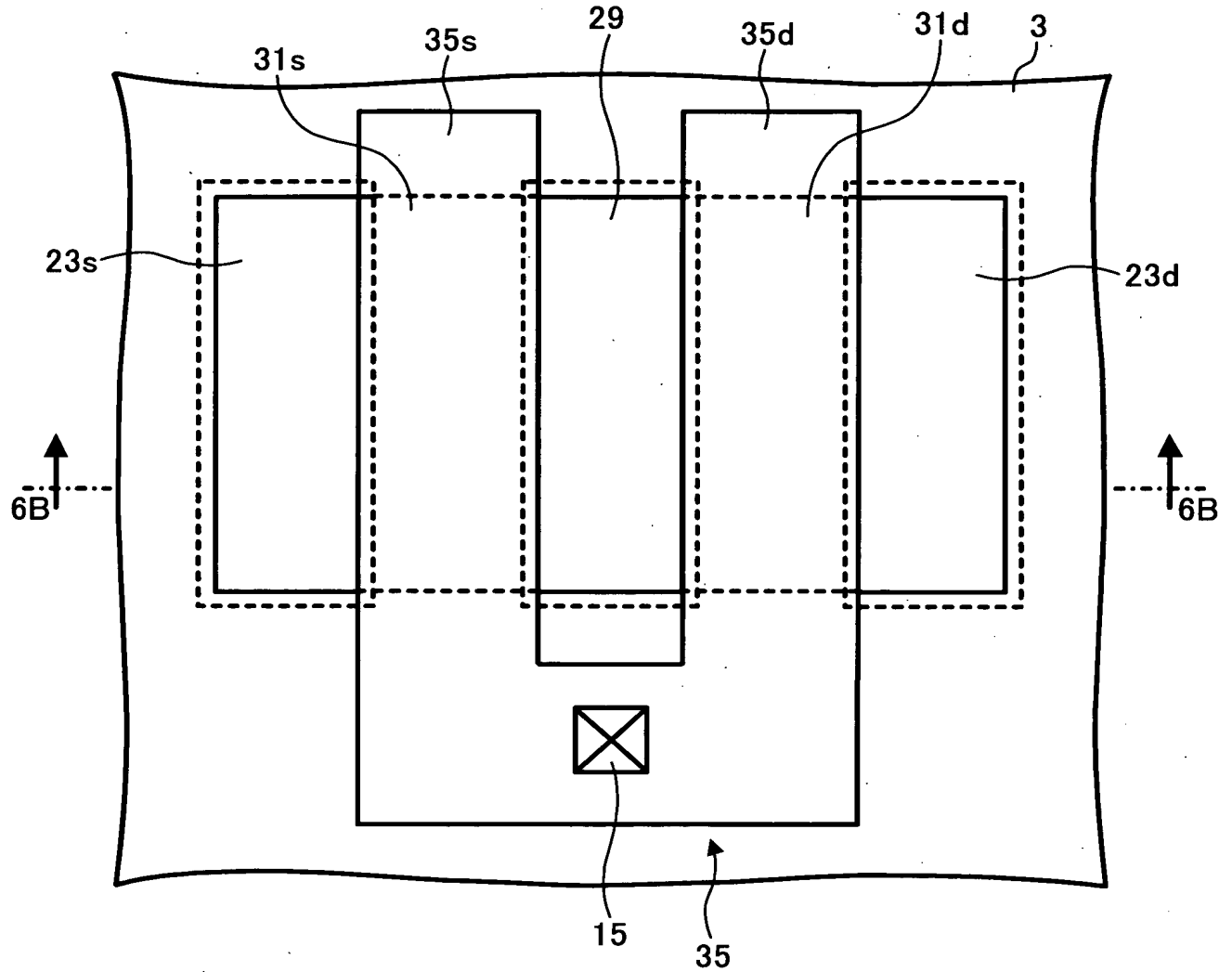


FIG. 6B

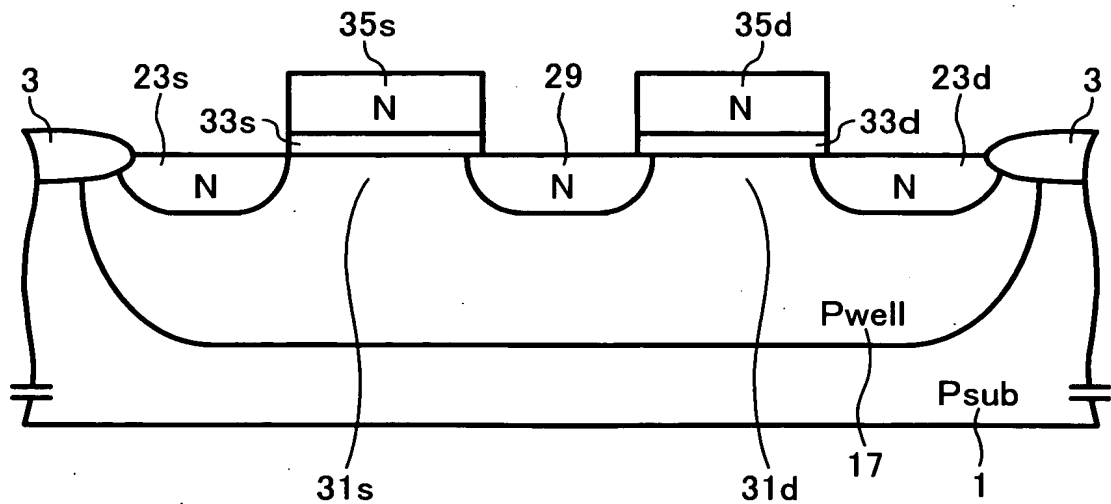


FIG. 7A

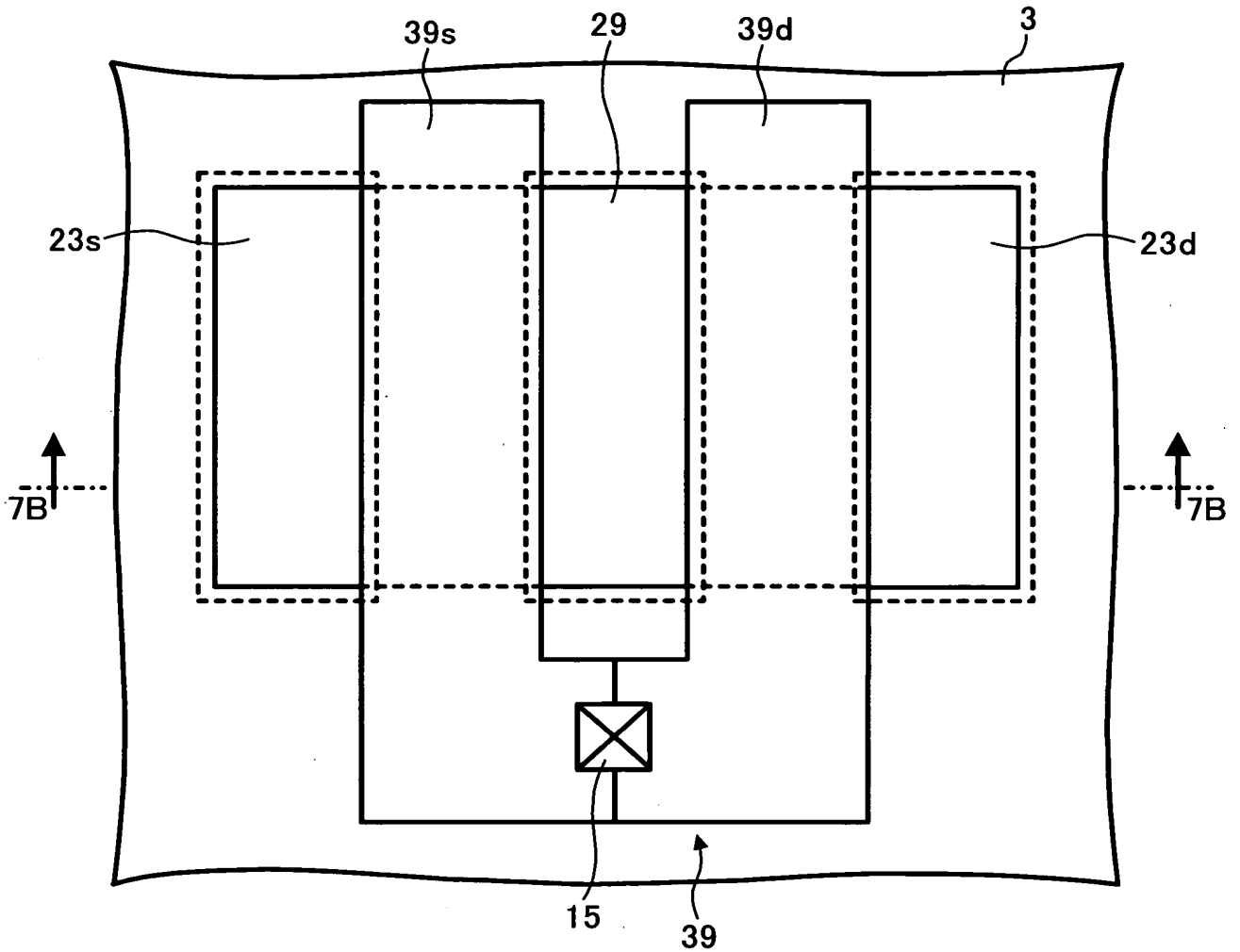
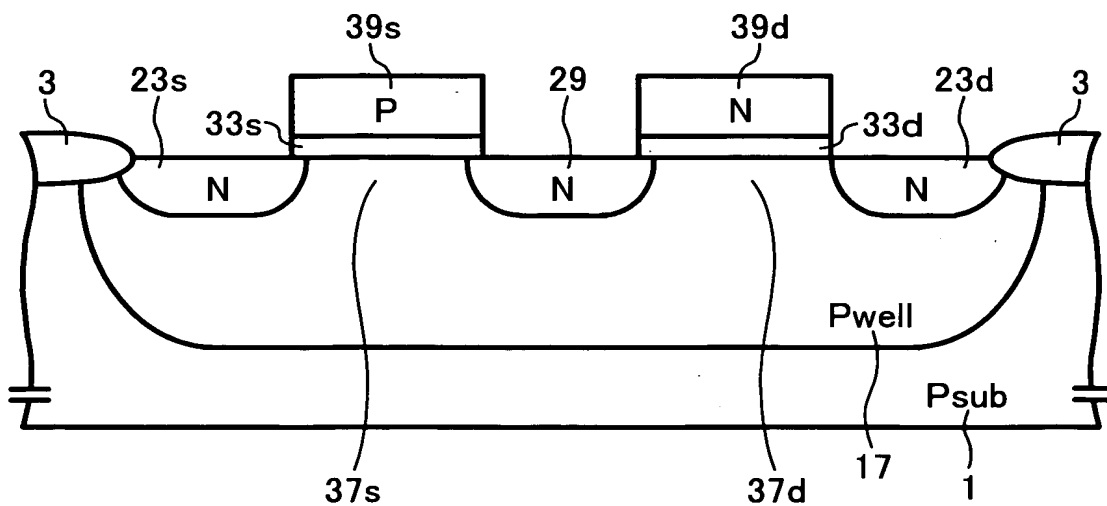
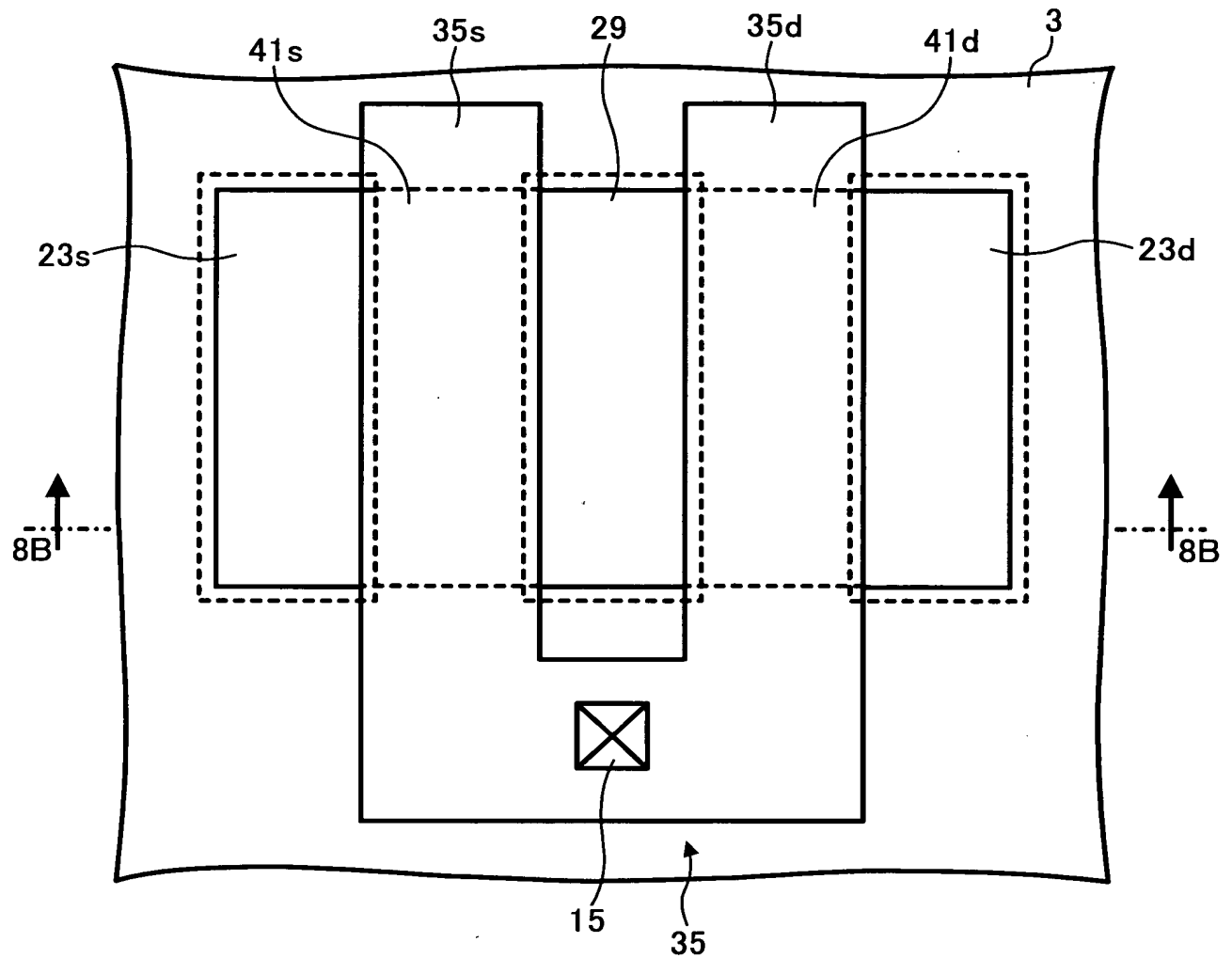


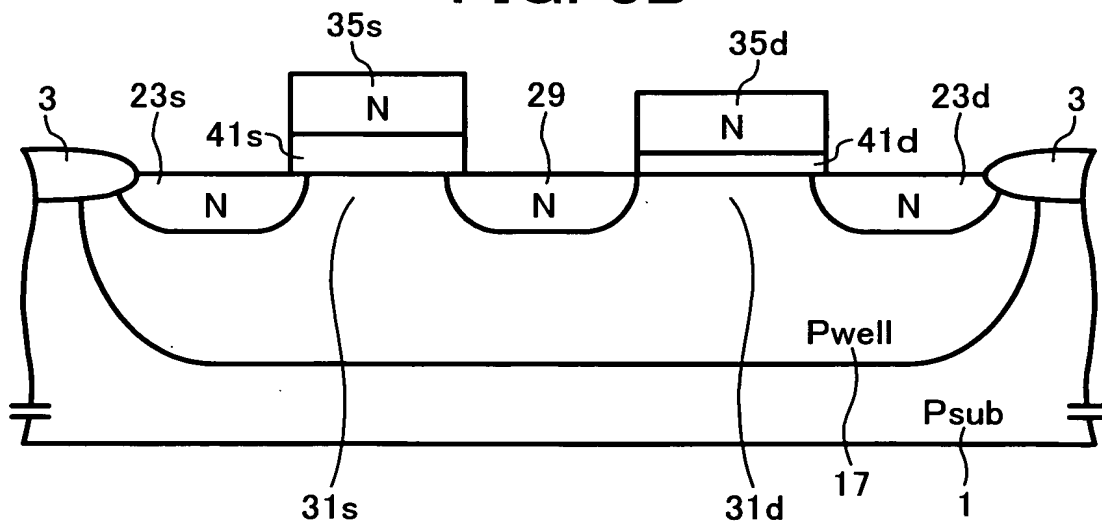
FIG. 7B



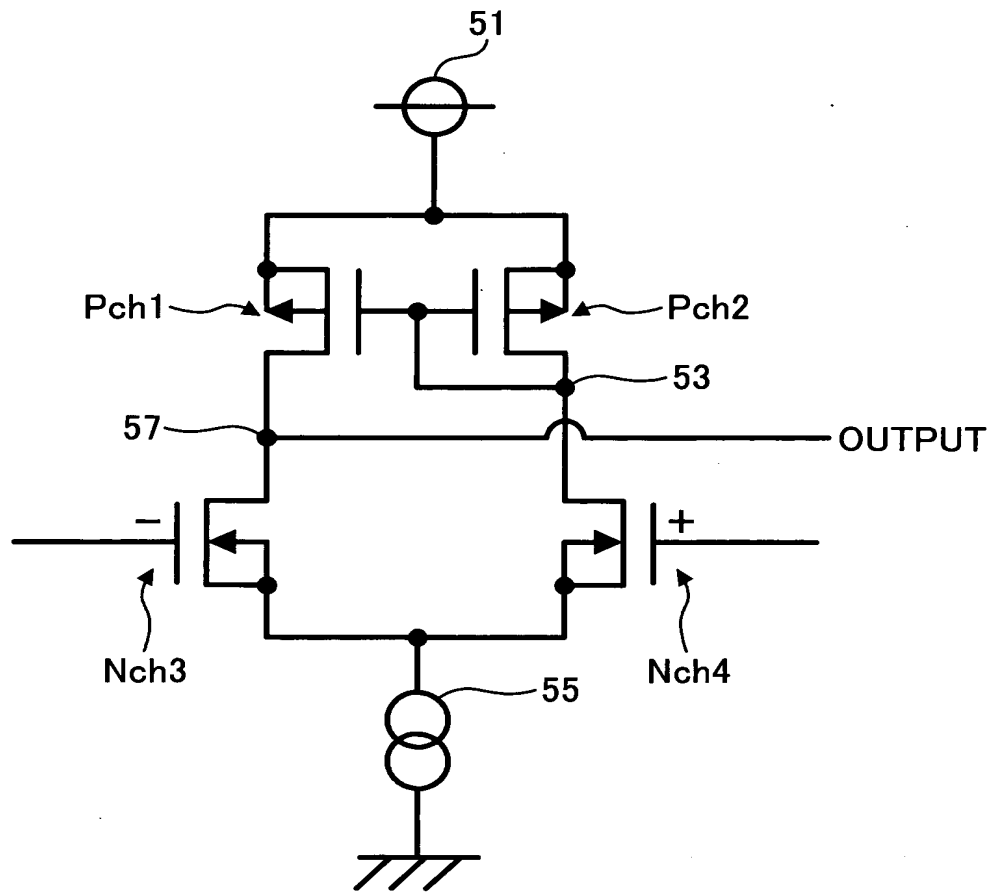
**FIG. 8A**



**FIG. 8B**



**FIG. 9**



**FIG. 10**

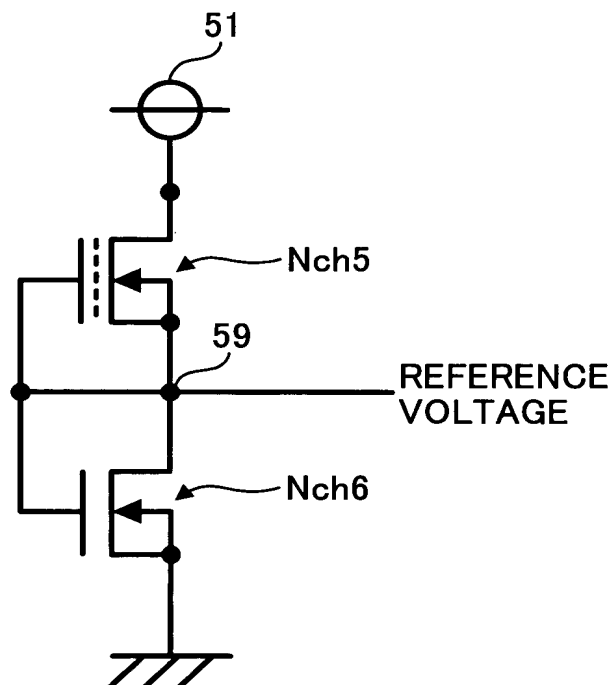




FIG. 11

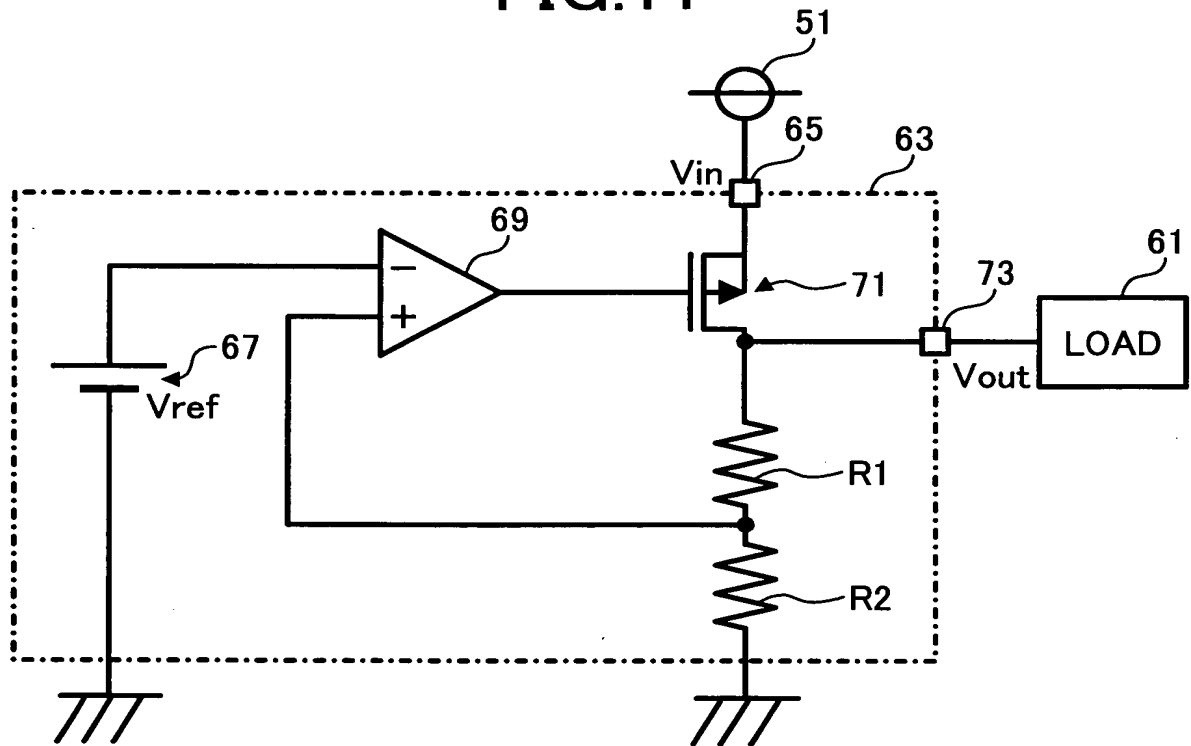


FIG. 12

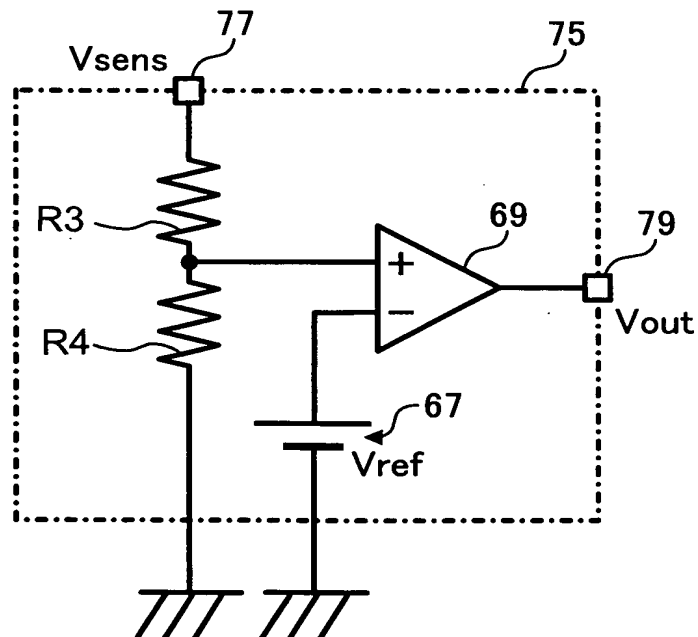


FIG. 13A

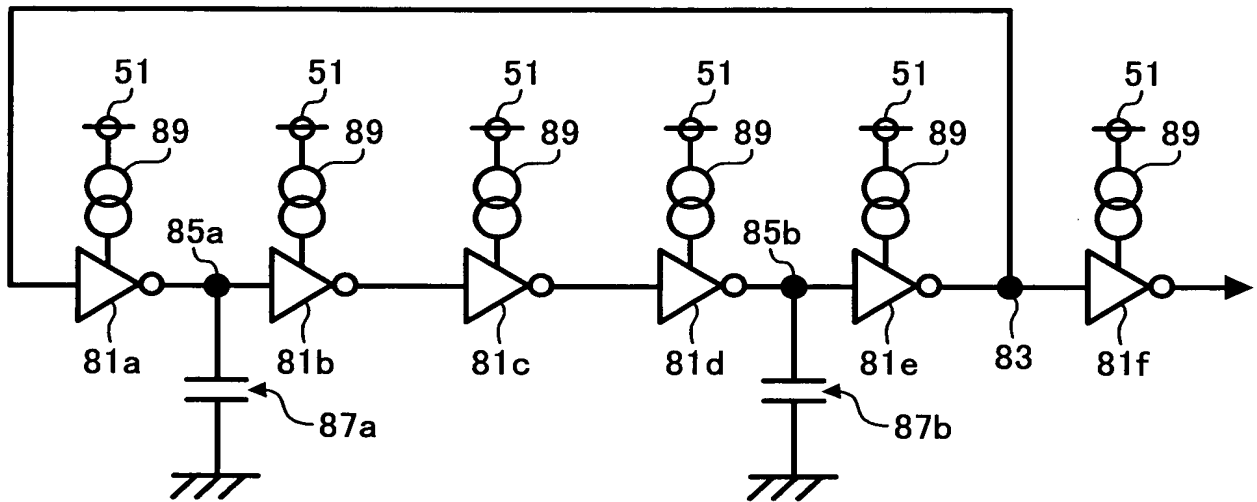


FIG. 13B

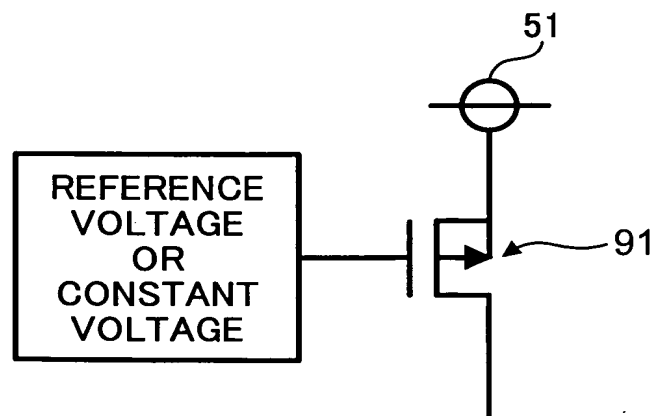


FIG.14

TABLE 1

	SOURCE SIDE V <sub>th</sub> -0.65V	DRAIN SIDE V <sub>th</sub> -0.35V	DRAIN SIDE V <sub>th</sub> +0.20V	$\lambda$ PERFORMANCE (A/V)
COMPARATIVE EXAMPLE 1	2.0 $\mu$ m	NOTHING	NOTHING	$157 \times 10^{-9}$
COMPARATIVE EXAMPLE 2	10.0 $\mu$ m	NOTHING	NOTHING	$35.4 \times 10^{-9}$
PRACTICAL EXAMPLE 1	2.0 $\mu$ m	2.0 $\mu$ m	NOTHING	$9.93 \times 10^{-9}$
PRACTICAL EXAMPLE 2	2.0 $\mu$ m	10.0 $\mu$ m	NOTHING	$33.2 \times 10^{-9}$
PRACTICAL EXAMPLE 3	2.0 $\mu$ m	NOTHING	10.0 $\mu$ m	0 (NO CHANGE)

FIG. 15

TABLE 2

	GATE ELECTRODE		$\lambda$ PERFORMANCE (A/V)	$\beta$ PERFORMANCE ( $\mu$ A/V <sup>2</sup> )
	SOURCE SIDE (P TYPE)	DRAIN SIDE (N TYPE)		
COMPARATIVE EXAMPLE	50 $\mu$ m	NOTHING	$3.80 \times 10^{-9}$	27.6
PRACTICAL EXAMPLE 1	10 $\mu$ m	40 $\mu$ m	$3.03 \times 10^{-10}$	145.0
PRACTICAL EXAMPLE 2	20 $\mu$ m	30 $\mu$ m	$9.61 \times 10^{-11}$	69.2
PRACTICAL EXAMPLE 3	30 $\mu$ m	20 $\mu$ m	0 (NO CHANGE)	44.9
PRACTICAL EXAMPLE 4	40 $\mu$ m	10 $\mu$ m	0 (NO CHANGE)	33.1